

July 1, 1998

LTC Michael W. Pratt
District Engineer
U.S. Army Corps of Engineers
696 Virginia Road
Concord, MA 01742-2751

Dear Colonel Pratt:

The U.S. Fish and Wildlife Service (Service) has reviewed the Section 404 permit application by Casco Bay Energy Company (Casco Bay Energy or the applicant) to fill 0.68 acres of freshwater wetlands in connection with the proposed construction of a 500-MW natural gas-fired electric generating facility (Maine Independence Station), which would be located on the site of the former Bangor Hydro-Electric Company's (BHE) Graham Station power plant in Veazie, Maine. Your February 12, 1998 request for formal consultation was received on February 17, 1998. This document represents the Service's Biological Opinion on the effects of that action on threatened bald eagles (*Haliaeetus leucocephalus*) in accordance with Section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531, et seq.).

This Biological Opinion is based on information on the proposed project that was provided by the applicant during informal and formal consultation (see Consultation History below). On May 21, 1998, the applicant submitted revised plans, which eliminated the previously proposed construction laydown area, and modified the location of the new access road. On June 8, 1998, the applicant provided the Service with additional information concerning the Maine Department of Environmental Protection's (MEDEP) Natural Resources Protection Act permit for the project.

Consultation history

Information on the proposed natural gas-fired electric generating facility and the potential effect on threatened bald eagles was exchanged during informal and formal consultation between our agencies, and is summarized here. (A complete administrative record of this consultation is on file in the Service's Maine Field Office,

located in Old Town, Maine.)

August 11, 1997 - Letter from A. Perillo, DES, to M. Bartlett, USFWS, requesting threatened and endangered species information for the proposed Maine Independence Station.

September 12, 1997 - Letter from W. Neidermyer, USFWS, to A. Perillo, DES, indicating that Section 7 consultation would be necessary for the proposed Maine Independence Station.

October 2, 1997 - Site visit to proposed Maine Independence Station in Veazie. Attended by W. Mahaney and L. Welch, USFWS, C. Todd, MDIFW, S. Mahaney, ACOE, J. Tarbell and D. Cowan, DES, C. Herter, Casco Bay Energy, C. Ahrens, Pierce Atwood, and S. Beyer, MEDEP.

October 10, 1997 - Letter from J. Tarbell, DES, to S. Beyer, MEDEP, providing proposed construction schedule.

October 22, 1997 - Phone conversation and fax exchange between L. Welch, USFWS, and J. Tarbell, DES, concerning proposed construction schedule.

December 8, 1997 - Meeting at MEDEP among S. Beyer, MEDEP, L. Welch, USFWS, C. Ahrens, Pierce Atwood, C. Herter, Casco Bay Energy, and J. Tarbell, DES, to discuss permitting and construction schedule for the Maine Independence Station facility.

January 20, 1998 - Letter from J. Tarbell, DES, to L. Welch, USFWS, providing NRPA application.

February 12, 1998 - Letter from LTC Pratt, ACOE, to M. Bartlett, USFWS, requesting formal consultation.

February 18, 1998 - Meeting at USFWS Office in Old Town, Maine among L. Welch, USFWS, C. Todd, MDIFW, S. Mahaney, ACOE, J. Tarbell, DES, C. Herter, Casco Bay Energy, T. DeHart, Duke/Fluor Daniel, and A. Donley, Duke Energy

February 27, 1998 - Letter from M. Bartlett, USFWS, to LTC Pratt, ACOE, acknowledging receipt of request to initiate formal consultation.

March 11, 1998 - Letter from T. DeHart, Duke/Fluor Daniel, to L. Welch, USFWS, providing final construction schedule and description of project activities.

May 21, 1998 - Letter from J. Tarbell, DES, to L. Welch, USFWS, providing information on new access road alignment and elimination of construction laydown area.

June 8, 1998 - Letter from J. Tarbell, DES to S. Beyer, Maine DEP, providing additional information for Natural Resource Protection Act permit.

BIOLOGICAL OPINION

The Service has geographically separated the bald eagle in the lower 48 states into recovery populations termed recovery regions. Maine is part of the 24-state, Northern States Recovery Region for bald eagles. In developing biological opinions pursuant to Section 7 of the Endangered Species Act (ESA), Service policy provides for the evaluation of jeopardy to a species such as the bald eagle, within its specific recovery region, rather than across the species' entire range within the coterminous 48 states.

A single pair of eagles has nested adjacent to the site of the proposed project for the past seven years. The pair has constructed two nests: one on the east side of the Penobscot River in Brewer, and one in Veazie, immediately adjacent to the facility on the west side of the Penobscot River.

The pair has alternated use between the nest sites, and both nests have been designated as bald eagle Essential Habitat under Maine's Endangered Species Act.

It is the Service's biological opinion that construction and operation of Casco Bay Energy's Maine Independence Station in Veazie, Maine will not jeopardize the continued existence of the bald eagle. The action will not jeopardize the bald eagle because the scope of the permit action, which is limited to the area currently serving as Bangor Hydro-Electric Company's Graham Station, will not preclude recovery and appreciably reduce the survival of the northern states' population of bald eagles. Critical habitat has not been designated for the bald eagle pursuant to Section 4 of the ESA; therefore, none will be destroyed or adversely modified by the proposed action.

Description of the proposed action

Casco Bay Energy proposes to construct a 500-megawatt (MW), combined cycle, natural gas-fired electric generating facility at an existing BHE powerplant site (Graham Station) in Veazie, Maine. The Maine Independence Station will obtain its fuel from the natural gas that is proposed to be transported from the Sable Island region of Nova Scotia by the Maritimes & Northeast Pipeline Project.

The proposed federal action is the issuance of a U.S. Army Corps of Engineers (Corps) permit under Section 404 of the Clean Water Act to fill 0.68 acres of freshwater wetlands in connection with the proposed project. Based on consultation with the Maine Department of Inland Fisheries and Wildlife (MDIFW) and the Service, the applicant has scheduled the construction activities, modified the site layout, and altered the alignment of the access road to minimize potential disturbance to the nesting eagles.

Species account/environmental baseline

In 1978, the bald eagle was listed as an endangered species in Maine and in 42 of the other contiguous states, and threatened in the remaining five states (USFWS 1979). At that time, environmental contaminants, human disturbance at nest sites, habitat loss, and shooting contributed to the eagle's decline (Palmer 1988, Wiemeyer et al. 1972). In 1988, the State of Maine passed legislation that allows eagle nests to be designated as Essential Habitat. Essential Wildlife Habitats are "areas currently or historically providing physical or biological features essential to the conservation of an endangered or threatened species in Maine and which may require special management considerations" (MDIFW 1995). The Northern States Recovery Region Recovery Team and MDIFW have identified the long-term protection of bald eagle nesting habitat as a high priority in the effort to recover the species (C. Todd, pers. comm.). Due to the significant increase in the number of bald eagles breeding in the United States, the Service reclassified the bald eagle from an endangered to a threatened species on August 11, 1995 (USFWS 1995).

Ecology of bald eagles in Maine

Bald eagles generally form breeding pairs and establish nesting territories when they sexually mature at about five years of age. Throughout their reproductive life of 20-30 years (Stalmaster 1987), bald eagles demonstrate extreme loyalty to a nesting location, continuing to use the same territory each year. Over the years of territory occupancy, several alternate nests may be constructed. Nesting is generally initiated from mid-March to April. In some instances, as is the case with the eagles nesting adjacent to the proposed project, a territory will generally be occupied year round. On average, nesting females will lay between one and three eggs, which require a 35-day incubation period. Eaglets fledge from the nest at approximately 12 weeks of age, although they may remain in the nesting territory for an indefinite period of time.

History of eagle nesting at the project site

Eagles initiated nesting on the eastern (Brewer) shore of the Penobscot River in 1991. In 1996, the pair constructed a nest across the River in Veazie, and fledged one eaglet. In 1997, the pair returned to their first nest site in Brewer, but the female was injured in April of that same year. In 1998, the pair again nested on the Brewer side of the River, and as of late June were actively raising young. However, both nest sites remain intact and could potentially serve as nest sites in the future. In addition, the riparian area along the western shore of the River has historically provided foraging and roosting habitat for the birds.

Direct and indirect effects of the action

Casco Bay Energy proposes to construct their new natural gas-fired electric generating project at the site of an existing, albeit no longer active, oil-fueled facility (Graham Station). The majority of demolition and building construction will occur immediately outside the state- designated Essential Habitat zone, although it will likely be visible from the Brewer nest site. The principal activities proposed to occur within the Essential Habitat zone include: a) preconstruction and laydown work; b) road construction and subsequent construction vehicle traffic; and c) parking.

Graham Station no longer serves as an oil-fired electric generating facility, and is now primarily used as a vehicle storage area by BHE. The pair of eagles at the site has demonstrated tolerance to the current level of human activity and vehicle traffic. However, the proposed construction will significantly increase both human presence and traffic. This level of activity should diminish when the construction work is done. In an effort to minimize disturbance to the eagles, the applicant has modified its construction schedule to delay construction activities until after the critical nesting season in 1998. Continued human presence and construction activity throughout the winter and into the early spring should allow the eagles to acclimate to the disturbance prior to the 1999 nesting season. Should this level of activity prove to be unacceptable to the birds, they should have sufficient time to renest at a greater distance from the project. However, if construction activities were to stop next spring, and the birds initiated nesting adjacent to the project, a sudden reinitiation of work could result in nest abandonment. Casco Bay Energy has been informed about this situation, and has agreed to continue construction activities throughout the early spring.

Cumulative effects

Cumulative effects include the effects of future state, local or private actions that are reasonably certain to occur in the action area considered in this Biological Opinion. Future federal actions that are unrelated to the proposed action are not considered in this section, because they require separate review pursuant to Section 7 of the ESA. The Service anticipates that as a result of construction of this facility, the area will be subject to increased levels of human activity and vehicle traffic. We have not been informed of the specific route to be utilized to connect this facility to the Maritimes & Northeast Pipeline Project. In addition, it is unclear whether federal agencies will have an opportunity to review and comment on the linkage of the pipeline to this proposed new generating project. If afforded further opportunities for environmental review, the Service may want to place seasonal restrictions on pipeline construction activities near the site in order to avoid disturbing the eagles.

INCIDENTAL TAKE STATEMENT

Sections 4(d) and 9 of the ESA as amended prohibit taking of listed species of fish or wildlife without a special exemption. The ESA defines take as harass, harm, pursue,

hunt, shoot, wound, kill, trap, capture, or collect or attempting to engage in any such activity. Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering. Harass is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns, which include, but are not limited to, breeding, feeding or sheltering. Incidental take is any take of listed animal species that results from, but is not the purpose of, carrying out an otherwise lawful activity conducted by the federal agency or the applicant. Under the terms of Section 7(b)(4) and Section 7(o)(2), taking that is incidental to, and not intended as part of the agency action, is not considered a prohibited taking, provided that such taking is in compliance with the terms and conditions of this incidental take statement.

The project modifications which Casco Bay Energy have agreed to implement will help minimize impacts to bald eagles nesting adjacent to the construction site. In addition, this particular pair of eagles has demonstrated an unusually high level of tolerance to human presence and activity. However, the disturbance associated with the construction and operation of the facility, even with implementation of the terms and conditions listed below, may adversely affect the pair of bald eagles currently nesting adjacent to the site. The Service anticipates that this disturbance could result in a temporary reduction in productivity, but the development of the facility should not compromise the long-term suitability of the nesting site.

Eagles have been nesting at this territory for the past seven years, during which time they have produced an average of 0.67 young/nesting attempt. It is the Service's opinion that project-related disturbance during the initial 20-month construction schedule and subsequent operation could result in up to one fewer eaglet being produced, either through breeding failure or nest abandonment.

Reasonable and prudent measures

The Service finds that the following reasonable and prudent measure is necessary and appropriate to minimize take of bald eagles at nesting along the Penobscot River in Brewer and Veazie:

- S Minimize and monitor the effects of the site development and operation on the eagles currently nesting along the Penobscot River.

Terms and conditions

The terms and conditions described below are non-discretionary, and must be implemented by the Corps so that they become binding conditions of any permit issued to Casco Bay Energy, as appropriate, in order for the exemption in Section 7(o)(2) to

apply. The Corps has a continuing duty to regulate the activity covered by this incidental take statement. If the Corps (1) fails to require Casco Bay Energy to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit, and/or (2) fails to retain oversight to ensure compliance with these terms and conditions, the protective coverage of Section 7(o)(2) may lapse.

This Opinion concludes that there may be a take of bald eagles as a result of issuance of a Corps Section 404 permit to Casco Bay Energy to construct the Maine Independence Station in Veazie, Maine. The Service will not refer the incidental take of any such eagle for prosecution under the Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. §§ 703-712), or the Bald Eagle Protection Act of 1940, as amended (16 U.S.C. §§ 668-668d), if such take is in compliance with the terms and conditions specified herein.

1. To minimize disturbance to the nesting eagles during the 1998 nesting season, construction activities should not be initiated until after August 1, 1998. Construction activities should continue throughout the winter and early spring of 1999 to allow the eagles to acclimate to the activity prior to nest site selection in 1999. The Service anticipates that the majority of major construction activities should be completed by late winter 1999. Should there be any significant delays in construction schedule, Casco Bay Energy should contact the Service to ensure adequate protection for the eagles.
2. Construction and/or related activities should not be allowed south of the Shore Road, located in Veazie, east of the existing 115 kV substation.
3. Road construction and primary access to the facility should occur in the location identified in the May 15, 1998 site plan.
4. Any modification of the existing intake and outfall structures that are to be used for process water and wastewater must occur outside of the nesting season (i.e., must occur between August 1 and March 1).

Reporting and monitoring requirements

Annual bald eagle surveys by the MDIFW will provide the Service with necessary nest site selection and productivity information throughout the life of the project.

Reinitiation

This concludes formal consultation on the actions outlined in the description of the proposed action section of this Biological Opinion. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary federal agency

involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this Opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this Opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action.